## CHAPTER III

### WORKING PLANS

1. A working plan of operations should be drawn up in consultation with the Conservator and when the plan has been finally adopted it must be carried out.

### *General instructions*

2. Plans for five years in advance should be submitted to the Conservator two years before the expiry of the period covered by the existing plan. They should be generally in the form shown in Appendix B with such modifications as local circumstances may render necessary. Each plan must provide for the maintenance of all avenues on which the trees are not yet established, and the balance of the grant available must be allocated to extending avenues or filling gaps in existing avenues so far as funds for the maintenance of the new work can be assured in future years. The term "established" means that the trees have made such progress that they can be left to themselves, and no longer require irrigation or regular protection.

3. In order to draw up a plan it is necessary to know the annual grant, the cost of maintaining a mile of young avenue, the cost of planting a mile and maintaining it for the first year, and the number of years for which young trees of various kinds require irrigation and protection. The first datum is usually known with certainty; the others must be ascertained from past experience in the district, and no general standards can be laid down.

### *Choice of Roads*

4. The next step is to choose the roads on which the new planting should be done. In this connection the following points require consideration.

(*a*) The amount of traffic on the road. As the first object is to provide shade for travellers and improve the general landscape aesthetically it is obvious that those roads should first be planted on which the traffic is greatest.

(*b*) The suitability of the soil for planting.—Unplanted roads running through fertile loam should have the preference, provided they are sufficiently wide to allow space for the

trees without interfering with traffic or putting the trees on the very edge of fields lying along the road. Where there is no room for a line of trees on each side of a road it may be found that one line can be planted ; this should be on the south or west side so as to give shade during the hottest part of the day.

5. The question whether the money available for new planting should be given to work on unplanted roads or to filling up gaps in existing avenues is often difficult to decide. It is desirable in many ways that an avenue should be continuous, but there is frequently some difficulty in getting single trees to grow in a line with larger trees as the roots of the latter deprive the former of moisture ; or again it may be found that the existence of a gap is due to barrenness of the soil. Further, it usually costs much more to plant and maintain 100 trees spread over several miles of road than the same number at one place ; the mali has to go further, water is more difficult to get, and neglect is much more probable. When again an avenue is drying, it is a waste of money and effort to fill the gaps as they occur : it is better to wait a few years until the whole or almost the whole can be replanted. On the whole it may be said that where there are roads with heavy traffic and suitable soil still unplanted, it is better to concentrate effort on them than to expend it in filling small gaps in established avenues ; while where no suitable roads are left without avenues the money available should be devoted to filling gaps.

### *Choice of trees*

6. Having selected the roads to be planted, the next step is to decide what trees are to be planted on them. The considerations which affect this decision are dealt with in Chapter XIV.

### *Location of nurseries*

7. The next step is to decide where nurseries shall be located. It is always desirable that a nursery should be as near as possible to the length of road to be planted, as this reduces the expense of carriage and makes it easier to transport the young trees without injury. On the other hand, it is essential that the nursery should be so situated that it can be frequently inspected, that the soil is good, and that shade and water are

available. The question must, therefore, be decided on a consideration of the circumstances of each case.*

*Note.—In some places it has been found possible to establish nurseries in the compounds of inspection and such other bungalows and to place the caretaker in charge. This has worked very well where the caretaker happened to be careful gardner. As water is always to be had the caretaker has plenty of leisure and the nursery can be inspected by officers using the bungalow. But everything depends on the skill of the caretaker.

*Alterations in plans*

8. It may occasionally be necessary to depart from the sanctioned plan. If the plan has been carefully framed, it will hardly ever be desirable to plant more than has been provided for : and to do so frequently leads to difficulty in maintaining the extra work, which has not been provided for in the plan for future years. But a very unfavourable season may prevent planting from being carried out. Should this happen, or should there be an accidental omission, the plan should be revised so as to provide for a little more planting in the next year, care being taken that money is available for its maintenance. All revisions of plans should be submitted to the Conservator for approval. Similarly, if the District Board finds that it is in a position to increase the annual grant available for arboriculture, a revised plan should be submitted for approval.

*Map of avenues*

9. To facilitate the preparation of plans and the supervision of operations, on outline map of the district should be maintained showing all the roads and the established avenues. New lengths of avenue should not be shown as such on the map till they are established (paragraph 2). A simple plan is to show the avenues when planted in dotted lines on each side of the road, with the date of planting, and to convert the dotted line into a full line as each length of avenue becomes established.

## CHAPTER IV

### Tools required for arboricultural works

1. Various English implements are generally recommended in English books on gardening in India. But in tree-growing